CLAIMS

What is claimed:

1. A disk of an optical tester, comprising:

a transparent substrate that has a first surface and an opposite second surface;

a coating on said first surface of said transparent substrate, wherein a thickness of said coating is substantially inversely proportional to a refractive index of said coating.

2. The disk as recited in Claim 1, wherein said thickness of said coating is further substantially proportional to a wavelength of light used to be in said tester.

3. The disk as recited in Claim 1, wherein said coating is transparent.

4. The disk as recited in Claim 3, wherein said transparent coating has a hardness that is greater than a hardness of said transparent substrate.

5. The disk as recited in Claim 3, wherein said transparent substrate is a glass material and said transparent coating is a diamond-like-carbon material.

6. The disk as recited in Claim 5, wherein said diamond-like-carbon material is hydrogenated.

7. The disk as recited in Claim 5, wherein said diamond-like-carbon material is nitrogenated.

8. A flying height tester for a recording head of a hard disk drive, comprising:

a transparent substrate that has a first surface and an opposite second surface;

a coating on said first surface of said transparent substrate, said coating being adjacent to the recording head, wherein a thickness of said coating is substantially inversely proportional to a refractive index of said coating;

a light source that directs a beam of light through said transparent substrate and said coating and onto the recording head, wherein the beam of light is reflected from the recording head; and,

a photodetector that detects the reflected light beam.

9. The tester as recited in Claim 10, wherein said thickness of said coating is further substantially proportional to a wavelength of said light.

10. The tester as recited in Claim 8, wherein said coating is transparent.

11. The tester as recited in Claim 10, wherein said transparent coating has a hardness that is greater than a hardness of said transparent substrate.

12. The tester as recited in Claim 10, wherein said transparent substrate is a glass material and said transparent coating is a diamond-like-carbon material.

13. The tester as recited in Claim 12, wherein said diamond-like-carbon material is hydrogenated.

14. The tester as recited in Claim 12, wherein said diamond-like-carbon material is nitrogenated.

15. A process for providing a disk for an optical tester, comprising:

providing a transparent substrate that has a first surface and an opposite second surface;

attaching a layer on said first surface of said transparent substrate, wherein a thickness of said layer is substantially inversely proportional to a refractive index of said layer.

16. The process as recited in Claim 15, wherein said thickness of said layer is further substantially proportional to a wavelength of light used in said tester.

17. The process recited in Claim 15, wherein said layer is transparent.

18. The process as recited in Claim 15, wherein said transparent layer has a hardness that is greater than a hardness of said transparent substrate.

19. The process as recited in Claim 18, wherein said transparent substrate is a glass material and said transparent layer is a diamond-like-carbon material.

20. The process as recited in Claim 19, wherein said diamond-like-carbon material is hydrogenated.

21. The process as recited in Claim 20, wherein said diamond-like-carbon material is nitrogenated.